The opinion in support of the decision being entered today is *not* binding precedent of the Board.

## UNITED STATES PATENT AND TRADEMARK OFFICE

# BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Ex parte JAMES PHILIP O'REILLY

Appeal 2007-2132 Application 09/761,041 Technology Center 1700

Decided: June 13, 2007

Before BRADLEY R. GARRIS, PETER F. KRATZ, and LINDA M. GAUDETTE, Administrative Patent Judges.

GARRIS, Administrative Patent Judge.

## **DECISION ON APPEAL**

This is a decision on an appeal under 35 U.S.C. § 134 from the final rejection of claims 10, 12, and 13. We have jurisdiction under 35 U.S.C. § 6.

We AFFIRM.

The Appellant claims a continuous process for stabilizing the main flow of bright beer which comprises treating the main flow with polyvinyl polypyrrolidone (PVPP), continuously centrifuging the main flow of the thus-treated beer to simultaneously (1) remove the used PVPP therefrom and (2) to form a separate flow stream consisting of the main flow of stabilized beer. Further details regarding this process are set forth in representative independent claim 10 which reads as follows:

- 10. A continuous process for stabilizing the main flow of bright beer which comprises:
  - (a) treating the main flow of said beer with polyvinyl polypyrrolidone (PVPP), at least 90% by weight of which has a particle size of at least 10 μm, in an amount between 10 and 100 g/hl of said beer, to allow said PVPP to absorb polyphenolic material from said beer,
  - (b) continuously centrifuging the main flow of said thus-treated beer to simultaneously (1) remove at least 95% of the used PVPP therefrom in the form of a viscous concentrate paste or slurry in a beer carrier having a solids content of at least 25% by weight, and (2) to form a separate flow stream consisting of the main flow of stabilized beer,
  - (c) then collecting said used PVPP from said slurry by filtration,
  - (d) periodically regenerating fresh PVPP from the thus-collected used PVPP by contacting it with alkali and, after washing,
  - (e) recycling the regenerated PVPP for reuse in step (a).

The prior art set forth below is relied upon by the Examiner as evidence of obviousness:

Westermann US 4,166,141 Aug. 28, 1979 The admitted prior art described on pages 1-3 of the Specification.

All of the appealed claims are rejected under the second paragraph of 35 U.S.C. § 112 for failing to particularly point out and distinctly claim the subject matter which Appellant regards as the invention. According to the Examiner, "[t]here is no antecedent basis for the amended phrase 'the main flow' found in the preamble of claim 10" (Answer 3).

All appealed claims are rejected under the first paragraph of 35 U.S.C. § 112 as failing to comply with the written description requirement with respect to the claim 10 phrase "periodically regenerating fresh PVPP."

More specifically, the Examiner points out that, "[w]hile the specification refers to regenerating PVPP, there is no mention of 'fresh PVPP'" (Answer 3).

All appealed claims are rejected under 35 U.S.C. § 103(a) as being unpatentable over Westermann alone or in view of the admitted prior art. Concerning the rejection based on Westermann alone, the Examiner believes the claim 10 limitations relating to "the main flow" are satisfied by Westermann "because the scope of the [quoted claim 10] phrase is . . . broad" (Answer 4). As for the alternative rejection based on Westermann in view of the admitted prior art, the Examiner concludes that:

[I]t would have been obvious to one of ordinary skill in the art to modify the Westermann process so that the entire quantity of beer is processed using a centrifuge because Westermann teaches that filters and centrifuges are equivalents (col. 3, lines 3-11) and the [admitted] prior art acknowledges that beer is commonly filtered to remove PVPP.

(Id., sentence bridging 4-5).

#### **OPINION**

For the reasons set forth below, we will sustain each of the above noted rejections except for the § 103 rejection based on Westermann alone.

The § 112, 2nd ¶, Rejection

On this appeal, the Appellant does not contest this rejection. Instead, the Appellant states that "[t]he claims have been amended herein to obviate the indefiniteness of certain phrases, in particular the antecedent basis for ["]the main flow["]" (Br.(filed Jan. 16, 2004) 4).

The afore-quoted statement is in error. The claims on appeal, in fact, have not been amended to provide antecedent basis for the claim 10 preamble phrase "the main flow." While such an Amendment was filed on June 23, 2003, the Examiner denied entry of this Amendment in an Advisory Action mailed July 18, 2003. Moreover, the Appellant himself acknowledges that the Examiner has denied entry of this Amendment via the "Status of Amendments" page faxed by Appellant on July 11, 2006 for insertion into his Brief (filed Jan. 16, 2004).

In summary, on the record of this Appeal, the Appellant has neither contested nor obviated the indefiniteness issue raised by the Examiner. For

this reason, we hereby summarily sustain the Examiner's § 112, 2nd ¶, rejection of all appealed claims.

On page 4 of the Brief, the Appellant urges that his original disclosure contains descriptive support for periodically regenerating PVPP. However, as previously noted, the Examiner acknowledges descriptive support for this aspect of the here-claimed invention. As specifically explained by the Examiner, the rejection under consideration is based on the Examiner's determination that no descriptive support exists for the aspect of the claim 10 invention which requires periodically regenerating "fresh" PVPP. This is made clear by the Examiner's previously quoted statement that, "[w]hile the specification refers to regenerating PVPP, there is no mention of 'fresh PVPP'" (Answer 3).

The Brief contains no discussion at all of the claim 10 phrase "fresh PVPP" or descriptive support therefor. Under this circumstance, the Examiner's § 112, 1st ¶, rejection must be regarded as unchallenged on the record of this appeal. We hereby sustain, therefore, this rejection of all appealed claims.

The § 103 Rejection Based on Westermann Alone

Westermann discloses a continuous process for stabilizing beer by passing the entire flow of beer through line 4 and into a vessel 1 containing a fluidized bed of PVPP particles from which the main flow of beer exits via line 5 (figure 1; col. 1, ll. 38-45; col. 2, ll. 15-47). A portion of PVPP and

beer is continuously removed from the fluidized bed via line 6 and conducted to a wash station 7 which includes a solid-liquid separating device such as a filter or centrifuge (figure 1; col. 1, ll. 47-50; col. 2, ll. 48-57). From wash station 7, the separated liquid (i.e., beer) is passed by line 9 to line 5 where it is mixed with the stabilized beer exiting the fluidized bed vessel 1 (para. bridging col. 2-3). The separated PVPP solids from wash station 7 are sent to regeneration station 11 whereupon the regenerated PVPP is recycled via line 18 to the fluidized bed vessel 1 (col. 3, ll. 3-25).

The above-described Westermann process satisfies the claim 10 requirement of "treating the main flow of said beer with polyvinyl polypyrrolidone (PVPP)" because Patentee's main flow of unstabilized beer in line 4 is treated with PVPP in fluidized bed vessel 1. However, contrary to the Examiner's belief, the process of Westermann does not satisfy the claim 10 requirement of "continuously centrifuging the main flow of said thus-treated beer." In Westermann, the main flow of treated (i.e., stabilized) beer exits the fluidized bed vessel 1 via line 5. While Westermann envisions centrifuging the beer/PVPP mixture from line 6, this mixture cannot be properly regarded as corresponding to "the main flow of said thus-treated beer" (claim 10) as urged by the Examiner. Analogously, Westermann's separated beer exiting from wash station 7 via line 9 cannot be regarded as corresponding to the claim 10 "separate flow stream consisting of the main flow of stabilized beer."

For these reasons, we cannot sustain the § 103 rejection of all appealed claims based on Westermann alone.

The § 103 Rejection Based on Westermann in View of the Admitted Prior Art

In this alternative rejection, the Examiner relies upon the admitted prior art to supply the above-discussed deficiency of Westermann.

In the admitted prior art, beer is stabilized by treatment with PVPP (Specification 1). The PVPP is removed from the thus-treated beer by means of a very large filtration vessel (Specification 2:6-12). In light of this admitted prior art, the Examiner concludes that:

[I]t would have been obvious to one of ordinary skill in the art to modify the Westermann process so that the entire quantity of beer is processed using a centrifuge because Westermann teaches that filters and centrifuges are equivalents (col. 3, lines 3-11) and the [admitted] prior art acknowledges that beer is commonly filtered to remove PVPP.

(Answer, sentence bridging pages 4-5).

We agree with the Examiner that the combination of Westermann and the admitted prior art establishes a prima facie case of obviousness. This is because the result of the Examiner's proposed combination is predictable. Specifically, according to the Examiner's proposed combination, the entire quantity of PVPP-containing beer is processed in a solid-liquid separation device (as taught in the admitted prior art) wherein the solid-liquid separation device is a centrifuge (as taught by Westermann). It would have been predictable to an artisan that the proposed combination would be reasonably expected to be successful, particularly since the solid-liquid

separation device of the admitted prior art is a filter and the solid-liquid separation device of Westermann is either a filter or a centrifuge. *See KSR Int'l Co. v. Teleflex, Inc.*, 127 S.Ct 1727, 1740-41, 82 USPQ2d 1385, 1396 (2007).

Significantly, the Appellant in his Brief does not contest the Examiner's rejection based on Westermann in view of the admitted prior art. Indeed, the Brief discusses only the teachings of Westermann and does not discuss at all the teachings of the admitted prior art. These circumstances compel us to determine that the record of this appeal presents an unrebutted prima facie case of obviousness. As a consequence, we hereby sustain the § 103 rejection of all appealed claims based on Westermann in view of the admitted prior art.

#### CONCLUSION

The decision of the Examiner is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv) (2006).

# <u>AFFIRMED</u>

clj

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